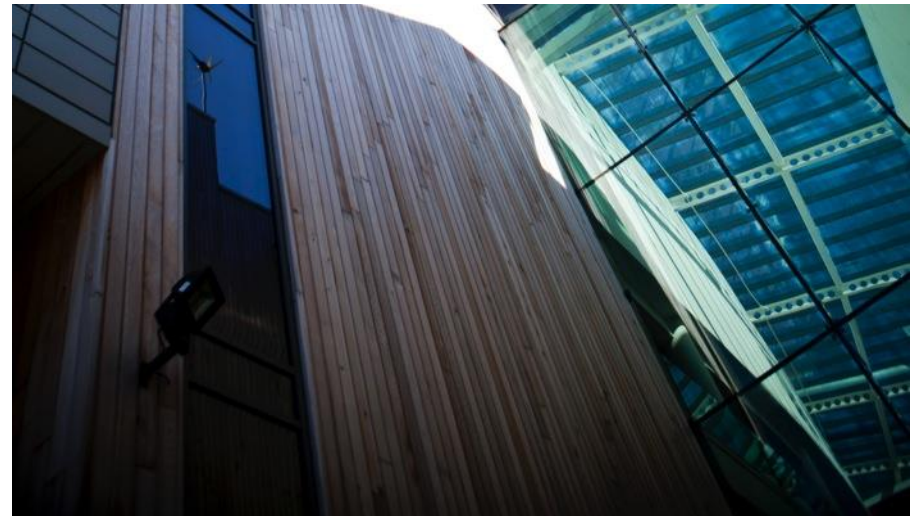


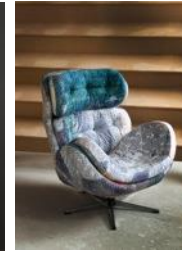
Art Design Architecture Huddersfield

Dr. Jess Power
e.power@hud.ac.uk



User centered design for medical
products

Acknowledgements



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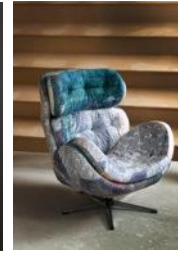
Special thanks to:

- Prof. David Leaper
- Jo Harris
- Little Heroes Cancer Trust
- Helen Turner
- Maureen Jackson
- Melissa Fletcher
- Ruth Clare

The research was originally presented at The Textile Institute World Conference 2016: Textiles inseparable from the human environment, 25-28th April Poznan, Poland, and due acknowledgement should be given to the conference proceedings - ISBN 978-83-928618-5-0.

Power, J., Leaper, D. and Harris, J. (2017) 'Designing functional medical products for children with cancer' International Journal of Fashion Design, Technology and Education . ISSN 1754-3266

Background



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- Local charity – real world problem
- Cancer in childhood is rare
- Intensive chemotherapy – central venous catheters (lines)
- Tunneled under skin, external opening on chest

Problem

- Risk of displacement
- Accidental complete removal
- Children may wish to conceal them
- Discomfort during sleep
- lines may dangle

Challenge

Harness to improve well-being of
children with cancer

Research Plan



Art
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- Interdisciplinary team Dr J Power, Prof D Leaper, J Harris
- Local cancer charity Little Heroes
- Student researcher (teaching/research nexus)

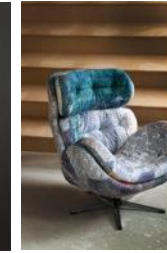
Philosophical Approach - constructive interpretivism

- Balance – academic enquiry and practical application
- Resolve epistemological and methodological differences
- Timeframe – interpretivist approach was adopted

Data collection techniques

- Market research / product research / standards
- Focus group / interviewed medical personnel
- Product analysis
- Synthesized the findings using a QFD

QFD



A method of translating customer needs ⁽¹⁶⁾ into appropriate technical requirements ⁽²⁹⁾

- Parents / carers**
- Location of harness (comfort)
 - Design function (functional)
 - Health and Safety (various)
 - Style line (aesthetics)

Comfort wear trial – current products



Priority; Comfort (fit), function, H&S, styleline

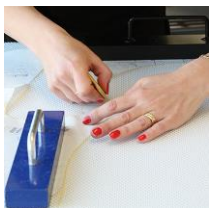
Output



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Harness to improve well-being of children with cancer

- Ergonomically designed
- Comfort / functionality/ dignity
- Stylish
- Antibacterial



The harness is now being commercialised under the Tookie brand (<http://www.tookie.co/>)



Any Questions ?

Project Lead:

Dr. Jess Power

e.power@hud.ac.uk



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- Jo Harris
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- Ruth Clare

References



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